

LISTING OF CLAIMS:

B1
cont. **Claim 1 (currently amended):** A control circuit for a semiconductor device with overheat protecting function, comprising:

a semiconductor element;

an overheat protecting means;

a chip to mount the semiconductor element and the overheat protecting means;

a control means to supply a pulse-width modulation control signal having a fixed pulse width to the semiconductor element; and

an outputting state detecting means to detect abnormality of output of the semiconductor device with overheat protecting function during an overheat protective operation of the overheat protecting means,

wherein the control means monitors detection output from the outputting state detecting means at a fixed monitoring timing each monitoring timing of the pulse-width modulation control signal's start time plus a fixed time period being shorter than the fixed pulse width.

and stops supplying the pulse-width modulation control signal to the semiconductor element when the detection output is generated successively predetermined times or successively during predetermined time.

Appln. Serial No. **09/730,588**
Amendment dated June 27, 2003
Reply to Office Action of March 27, 2003

B' canceled.

Claim 2 (original): The control circuit for a semiconductor device with overheat protecting function as set forth in claim 1, wherein

the semiconductor element is of a MOSFET, and the overheat protecting means includes a temperature detecting circuit, a latch circuit, and a gate breaking circuit.

Claims 3-4 (canceled)
